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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/388,935	09/02/1999	TADAMITSU MIYAWAKI	104144	4667

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EXAMINER

HAYES, JOHN W

ART UNIT	PAPER NUMBER
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3621

DATE MAILED: 01/07/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/388,935

Applicant(s)

MIYAWAKI ET AL.

Examiner

John W Hayes

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 November 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,5,7 and 11-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,5,7 and 11-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 August 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____. 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

1. Applicant's amendment filed 26 November 2003 was received by the Office prior to the final rejection mailed 12 December 2003 and, therefore, the final rejection mailed 12 December 2003 is hereby withdrawn. This action is in response to the amendment filed 26 November 2003.

Status of Claims

2. Claims 1 and 7 have been amended and claims 4, 6 and 15 have been canceled in the amendment filed 26 November 2003. Claims 2-3 and 8-10 have been previously canceled. Thus, claims 1, 5, 7 and 11-14 remain pending and are again presented for examination.

Drawings

3. The corrected or substitute drawings were received on 13 August 2002. These drawings are approved by the Draftsperson.

Response to Arguments

4. Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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6. Claims 1 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bowman et al, U.S. Patent No. 5,999,623 in view of Richards, U.S. Patent no. 6,069,957 and Dillon, U.S. Patent No. 5,727,065

As per **Claim 1**, Bowman et al disclose a contents distribution method for distributing digitized contents to plural users comprising:

- encrypting and broadcasting contents to plural users (Figure 1; Col. 4, lines 1-19),
- providing decoding information specific to a user in the plural users wherein the decoding information determines which encrypted contents among the broadcasted contents can be utilized by the user (Figures 1a and 1b, UID, tag values and subscription keys(S-Key); Col. 5, lines 1-23)
- generating a decoding key that decodes the encrypted content from actual decoding information accompanying the encrypted content and user identifying information (Col. 5, lines 10-55; **D-Key=U-Key+S-Key**);
- decoding the encrypted contents using the generated decoding key and utilizing of a decrypted content thereof by a user (Col. 5, lines 47-54; Col. 19, lines 39-46).

Bowman et al fail to disclose selecting by the user at least one of the encrypted content from the broadcasted contents that can be utilized by the user, although this would have been obvious to one having ordinary skill in the video distribution arts. For example, users of cable television generally do not have access to certain broadcasted channels of information unless they have selected to have access to these channels. Richards discloses a content distribution system and further teaches that users select the specific programs from a plurality of broadcasted program they would like to have access to (Col. 13, lines 55-67). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify the method of Bowman et al and include the ability to allow the user to select which programs or content from a plurality of broadcasted contents they are interested in having access to. The well known motivation is to reduce the cost to the user so that they are responsible for paying for only the

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programs or content to which they are interested. Dillon further discloses that a catalog of available contents is distributed to the plural users and further wherein the users can then select the content that they wish to receive. However, It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify the method of Bowman and distribute the available contents to the user and further allow the user to select the contents he/she is interested in after reception of the contents. Dillon teaches that this method is not necessary since it would waste resources by requiring the user to receive content not of interest. The motivation would be to allow the user to determine which content he/she wishes to receive and charging the user for only the content that he/she receives without wasting resources by requiring the user to receive content not of interest (Col. 11 line 65-Col. 12 line 5). Thus, this provides further evidence that it would have been obvious to one of ordinary skill in the art to modify Bowman and distribute the available contents to the user and allow the user to select the contents he/she is interested in after the reception of the contents.

Bowman et al further discloses providing decoding information specific to each user (Figure 1b, S-Keys), however, discloses that this information is transmitted to the users separately from the content and, therefore, fail to disclose that the decoding information accompanies the encrypted contents. Richards discloses a restricted access content distribution system and further teaches providing decoding information in a code packet which accompanies the encrypted content (Figure 13; Col. 9 line 55-Col. 10 line 4). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify the method of Bowman et al and provide the user specific decoding information together with the broadcasted encrypted content as taught by Richards. This feature would relieve the content provider from the requirement to separately transmit the decoding information, thereby saving bandwidth and costs.

Bowman et al further fail to disclose executing accounting to the user according to said utilized decrypted content. Dillon discloses executing accounting to the user according to said utilized contents (Col. 4, lines 15-20; Col. 5, lines 43-50; Col. 6, lines 19-24; Col. 7, lines 26-38; Col. 8, lines 28-43). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify the method of Bowman and include an account feature as taught by Dillon in order to compensate the

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content provider for providing the service to the user. Billing customers by accounting for the services used such as broadcasted video or content is well known in the art and it would have been obvious to one having ordinary skill in the art to bill the user based on an accounting of the services used based on the teachings of Dillon.

As per **Claim 5**, Bowman et al fail to disclose wherein the content includes a document displayed or printed in a page unit and the accounting is executed for the page unit. Dillon further discloses wherein the contents mean a document displayed in a page unit (Col. 1, lines 55-65) and wherein the accounting is executed for the page unit (Col. 4, lines 16-20; Col. 7, lines 26-30). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify the method of Bowman et al and include accounting for documents displayed on a page unit as taught by Dillon. This would allow more flexibility in the method of Bowman et al since it would enable the accounting for a variety of content types including documents displayed on a page unit. Bowman et al also provides motivation by suggesting that the system includes the distribution of a variety of content such as voice messages, data messages and any other suitable types of messages (Col. 4, lines 7-14).

7. Claims 7 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bowman et al, U.S. Patent No. 5,999,623 in view of Richards, U.S. Patent no. 6,069,957, Dillon, U.S. Patent No. 5,727,065 and Downs et al, U.S. Patent No. 6,226,618 B1

As per **Claim 7**, Bowman et al disclose a contents distribution method for distributing digitized contents to plural users comprising:

- a distribution device that distributes encrypted contents by a content provider to plural users (Figure 1; Col. 4, lines 1-20) and provides decoding information specific to a user in the plural users wherein the decoding information determines which encrypted contents among the broadcasted contents can be utilized by the user (Figures 1a and 1b, UID, tag values and subscription keys(S-Key); Col. 5, lines 1-23),

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- a user terminal that receives encrypted contents distributed by the distribution device (Figure 1; Col. 4, lines 12-18; Col. 6, lines 60-67; Col. 9 line 65-Col. 10 line 6), generates a decoding key that decodes the encrypted content from actual decoding information and user identifying information (Col. 5, lines 10-55; **D-Key=U-Key+S-Key**), and decodes the encrypted contents using the generated decoding key and utilizing of a decrypted content thereof by a user (Col. 5, lines 47-54; Col. 19, lines 39-46).

Bowman et al fail to disclose selecting by the user at least one of the encrypted content from the broadcasted contents that can be utilized by the user, although this would have been obvious to one having ordinary skill in the video distribution arts. For example, users of cable television generally do not have access to certain broadcasted channels of information unless they have selected to have access to these channels. Richards discloses a content distribution system and further teaches that users select the specific programs from a plurality of broadcasted program they would like to have access to (Col. 13, lines 55-67). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify the method of Bowman et al and include the ability to allow the user to select which programs or content from a plurality of broadcasted contents they are interested in having access to. The well known motivation is to reduce the cost to the user so that they are responsible for paying for only the programs or content to which they are interested. Dillon further discloses that a catalog of available contents is distributed to the plural users and further wherein the users can then select the content that they wish to receive. However, It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify the method of Bowman and distribute the available contents to the user and further allow the user to select the contents he/she is interested in after reception of the contents. Dillon teaches that this method is not necessary since it would waste resources by requiring the user to receive content not of interest. The motivation would be to allow the user to determine which content he/she wishes to receive and charging the user for only the content that he/she receives without wasting resources by requiring the user to receive content not of interest (Col. 11 line 65-Col. 12 line 5). Thus, this provides further evidence that it would have been obvious to one of ordinary skill in the art to modify

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Bowman and distribute the available contents to the user and allow the user to select the contents he/she is interested in after the reception of the contents.

Bowman et al further discloses providing decoding information specific to each user (Figure 1b, S-Keys), however, discloses that this information is transmitted to the users separately from the content and, therefore, fail to disclose that the decoding information accompanies the encrypted contents.

Richards discloses a restricted access content distribution system and further teaches providing decoding information in a code packet which accompanies the encrypted content (Figure 13; Col. 9 line 55-Col. 10 line 4). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify the method of Bowman et al and provide the user specific decoding information together with the broadcasted encrypted content as taught by Richards. This feature would relieve the content provider from the requirement to separately transmit the decoding information, thereby saving bandwidth and costs.

Bowman et al further fail to disclose executing accounting to the user according to said utilized decrypted content. Dillon discloses a central station that collects and totalizes accounting information generated by the user terminal (Col. 4, lines 15-20; Col. 7, lines 26-38; Col. 8, lines 28-43). And executing accounting to the user according to said utilized contents (Col. 4, lines 15-20; Col. 5, lines 43-50; Col. 6, lines 19-24; Col. 7, lines 26-38; Col. 8, lines 28-43). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify the method of Bowman and include an account feature as taught by Dillon in order to compensate the content provider for providing the service to the user. Billing customers by accounting for the services used such as broadcasted video or content is well known in the art and it would have been obvious to one having ordinary skill in the art to bill the user based on an accounting of the services used based on the teachings of Dillon.

Bowman et al fail to disclose, however, Dillon discloses a contents distribution method including summary information showing a summary of the available contents (Col. 4, lines 5-7 and 53-60; Col. 6, lines 12-24 and 35-41). Dillon, however, fails to specifically disclose that the summary information is attached to the encrypted contents and displayed only if decoding information determines which encrypted contents can be utilized by the user. Dillon teaches that the summary data is transmitted

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separately from the content data and in unencrypted form. Bowman et al further teaches a system wherein decoding information determines which encrypted contents can be utilized by the user, however, also fails to disclose summary information. Downs et al disclose an electronic content delivery system for providing digital content in secure containers to a plurality of users and further teach that summary information and list information (Col. 9, lines 21-32) is included in the encrypted contents container (Col. 38 line 21-Col. 39 line 20 and Col. 52, lines 40-51; Col. 29, lines 30-35) and wherein the summary information and list information is not displayed unless it has been decrypted using the decryption information (Col. 9, lines 48-51; Col. 10, lines 19-24; Col. 18, items 125, 127, 132 and 148 in the table; Figure 15A, metadata controls/display; Col. 74, lines 25-35; Col. 81, lines 60-65; Col. 84, lines 44-67; Col. 85, lines 1-50). It would have been obvious to one of ordinary skill in the art to modify the method of Bowman et al and Dillon and include the summary information and list information in encrypted form along with the encrypted content information in a secure container and only displaying this information upon decryption of the secure container in view of the teachings of Downs et al. Downs et al provides motivation for encrypting the summary information and list information so that it can be protected in the case where the content provider wants to charge a fee for the summary information (Col. 73, lines 33-40).

As per Claim 11, Bowman et al further disclose wherein the distribution is executed by broadcast (Figure 1; Col. 4, lines 1-19).

8. Claims 12-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bowman et al, U.S. Patent No. 5,999,623, Richards, U.S. Patent no. 6,069,957, Dillon, U.S. Patent No. 5,727,065 and Downs et al, U.S. Patent No. 6,226,618 B1 as applied above and in further view of Stefik et al, U.S. Patent No. 5,634,012.

As per Claims 12-14, Bowman discloses a contents distribution system wherein the user terminal comprises:

- a data sink that receives encrypted contents distributed from the distribution device (Figure 1),

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- a data output part that decodes the encrypted contents (Figure 2)

Dillon further discloses generating accounting information according to the quantity of utilized decoded contents (Col. 4, lines 15-20; Col. 5, lines 43-50; Col. 6, lines 19-24; Col. 7, lines 26-38; Col. 8, lines 28-43). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify the method of Bowman to include the accounting features of Dillon as discussed above.

Bowman et al, Dillon, Richards and Downs et al fail to specifically disclose a printer that prints the contents. Stefik et al disclose a system for controlling the distribution and use of digital information and teach wherein a printer is used to print a certain number of copies of the decoded information (Col. 38, lines 21-62) and wherein the user device is used to display the digital contents such as rendering it for reading (Col. 37, lines 60-67) and performs closing transaction steps including initiating a charging transaction based upon the quantity of the utilized contents (Col. 38, lines 19-21; Col. 33, lines 48-59). It would have been obvious to one of ordinary skill in the art to modify the methods of Bowman et al, Dillon, Richards and Downs et al and incorporate the ability to not only display the decoded content, but also print the decoded content and charge a fee for printing of the document as taught by Stefik et al. The motivation would be to provide the convenience to the user of having the ability to render the digital content by using a printer so that it could be carried in hardcopy form. It also would provide a benefit to the content provider by allowing the content provider to charge a fee for printing the content as taught by Stefik et al.

Conclusion

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH**

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shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

10. The prior art previously made of record and not relied upon is considered pertinent to applicant's disclosure.

- Mason discloses a method of encrypting broadcast television signals and teaches wherein each customer has a unique key in order to decrypt the broadcast signal and provide different entitlements to each customer
- Hirose discloses a scrambling method for data broadcasting and teaches encrypting each type of news data with a separate key so that each user can be assigned different access to the information based on which keys they possess.
- Richards discloses a method for providing a hierarchical key system for restricted access television systems and teaches wherein each customer can be granted access to certain programs in the broadcast based upon which key they possess.
- Steinberg et al disclose a software fingerprinting and branding method wherein the content is decoded using key information which is only known by the user and wherein identification of the user is embedded in the encoding program. The user is not given access unless the user provides the key along with identification data.
- Yuval et al disclose a method for controlling unauthorized access to information distributed to users and teach that the information is decoded using keys that are based upon user information such as name, credit card number, etc.
- Chou et al disclose a method of software distribution protection using a key that relies upon a unique factor such as a serial number or profile or fingerprint of the users computer.

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- Saito discloses a secure data broadcasting system wherein encrypted content is broadcast to users that decode the information
- Kazmierczak et al disclose a cryptographic system for effecting metered purchases of encrypted data for a local encrypted database
- Peterson, Jr. discloses a system for distribution of secured content wherein the user decrypts the content and is available for viewing during a certain timeframe
- Ginter et al disclose a system and method for secure transaction management wherein content is distributed to users and assigned certain rights for accessing the data
- Choy discloses the distribution of content to users wherein a protection specification including information for controlling the use of the content is attached to the content and transported together
- Kocher et al disclose a secure cryptographic rights unit for cryptographically regulating access to digital content distributed over a network
- WO 90/02382 discloses an information distribution system that provides encrypted information to a user that corresponds to criteria individually selected by the user and then charges the user only for the selected information provided
- Thyfault, Mary E., "Data From Above", discloses a satellite service that broadcasts encrypted information to users and are charged for the amount of information downloaded.

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11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Hayes whose telephone number is (703)306-5447. The examiner can normally be reached Monday through Friday from 5:30 to 3:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jim Trammell, can be reached on (703) 305-9768.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1113.

Any response to this action should be mailed to:

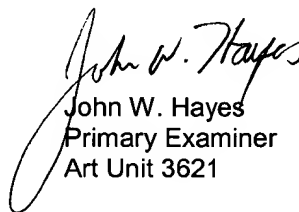
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or faxed to:

(703) 872-9306 [Official communications; including
After Final communications labeled
"Box AF"]

(703) 746-5531 [Informal/Draft communications, labeled
"PROPOSED" or "DRAFT"]

Hand delivered responses should be brought to Crystal Park 5, 2451 Crystal Drive, Arlington,
VA, 7th floor receptionist.


John W. Hayes
Primary Examiner
Art Unit 3621

December 30, 2003